

Claims

1. Flow control body for separate control of a cooling fluid inflow and a cooling fluid outflow for combustion chambers (15) with a closed cooling system for turbines,
5 wherein
the flow control body (6) has a cross-section (7) with a non-rotationally symmetrical cross-sectional shape in a flow control section.
- 10 2. Flow control body according to Claim 1, wherein the cross-section is embodied in such a way that a circumcircle placed around this is subdivided by the contour of the cross-section (7) into at least two separate parts.
- 15 3. Flow control body according to Claim 2, wherein it has a figure-of-eight shaped cross-section (7).
4. Flow control body according to one of the Claims 1 to 3, wherein it has passage openings in the flow control section to allow the passage
20 of flowing cooling fluid.
5. Flow control structure for cooling fluid control in a combustion chamber (15) with a closed cooling system for a turbine,
wherein it has a flow control body (6) according to one of the Claims
25 1 to 4.
6. Flow control structure according to Claim 5, wherein
it has a shower insert (3) which is connected for flow engineering efficiency to a cooling fluid feed system routed through the flow control
30 body (6) and provided with a plurality of fine passage openings (4), said shower insert directing the cooling fluid entering for impingement cooling onto an impingement plate (2).

7. Flow control structure according to Claim 6, wherein the shower insert (3) is embodied as a plate shape, the flow control body (6) has, on its side facing the shower insert (3), a folded-over edge (21) on which the shower insert (3) is supported, and the shower insert (3) is
5 connected to the flow control body (6).

8. Flow control structure according to Claim 7, wherein the flow control body (6) has, in a central area, a receptacle provided with a surrounding collar (19), into which receptacle, for the purpose of fixing
10 the shower insert (3) in position, a screw bolt (5) introduced through this can be screwed, whereby in the assembled state the screw bolt (5) presses the shower insert (3) onto the collar.

9. Flow control structure according to one of Claims 5 to 8, .
15 wherein the flow control body (6) and the shower insert (3) are inserted in a connecting piece (10) in a receptacle space disposed in the connecting piece (10), whereby the flow control body (6) has structures (18), for example stud-like elevations, which engage with the connecting piece in order to transmit a force flow (10).

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10. Flow control structure according to Claim 9, wherein the impingement plate (2) is placed on top of an edge (24) of the connecting piece surrounding the receptacle space and is welded to this edge (24), whereby the impingement plate (2) has an access opening (25) which can be
25 closed by means of a plug (20) in the area underneath which the screw bolt (5) is disposed.

11. Flow control structure according to one of Claims 9 or 10, wherein the flow control body (6) with a figure-of-eight shaped cross-section (7) is inserted into a circular opening (22) of the connecting
30 piece (10), whereby the circular opening (22) surrounds the figure-of-eight shaped cross-section (7) in the manner of a circumcircle, and the circular opening (22) is inserted together with the figure-of-eight shaped cross-section (7) of the flow control body (6) in a circular
35 recess in a combustion chamber wall (12) in a sealing manner, whereby the flow control body (6) subdivides the circular recess into four segments

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(8, 9), of which two (9) are connected to a cooling fluid feed system and two (8) to a cooling fluid discharge system.